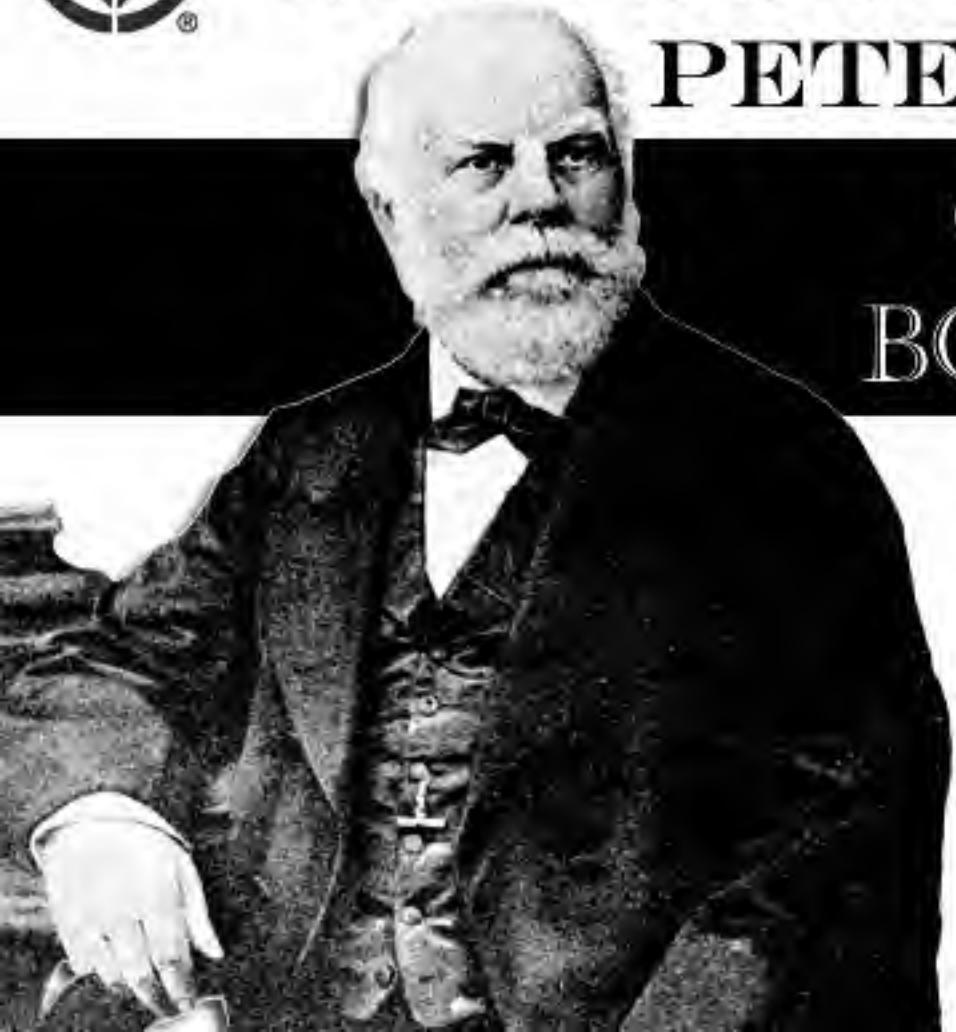




MISSOURI BOTANICAL GARDEN

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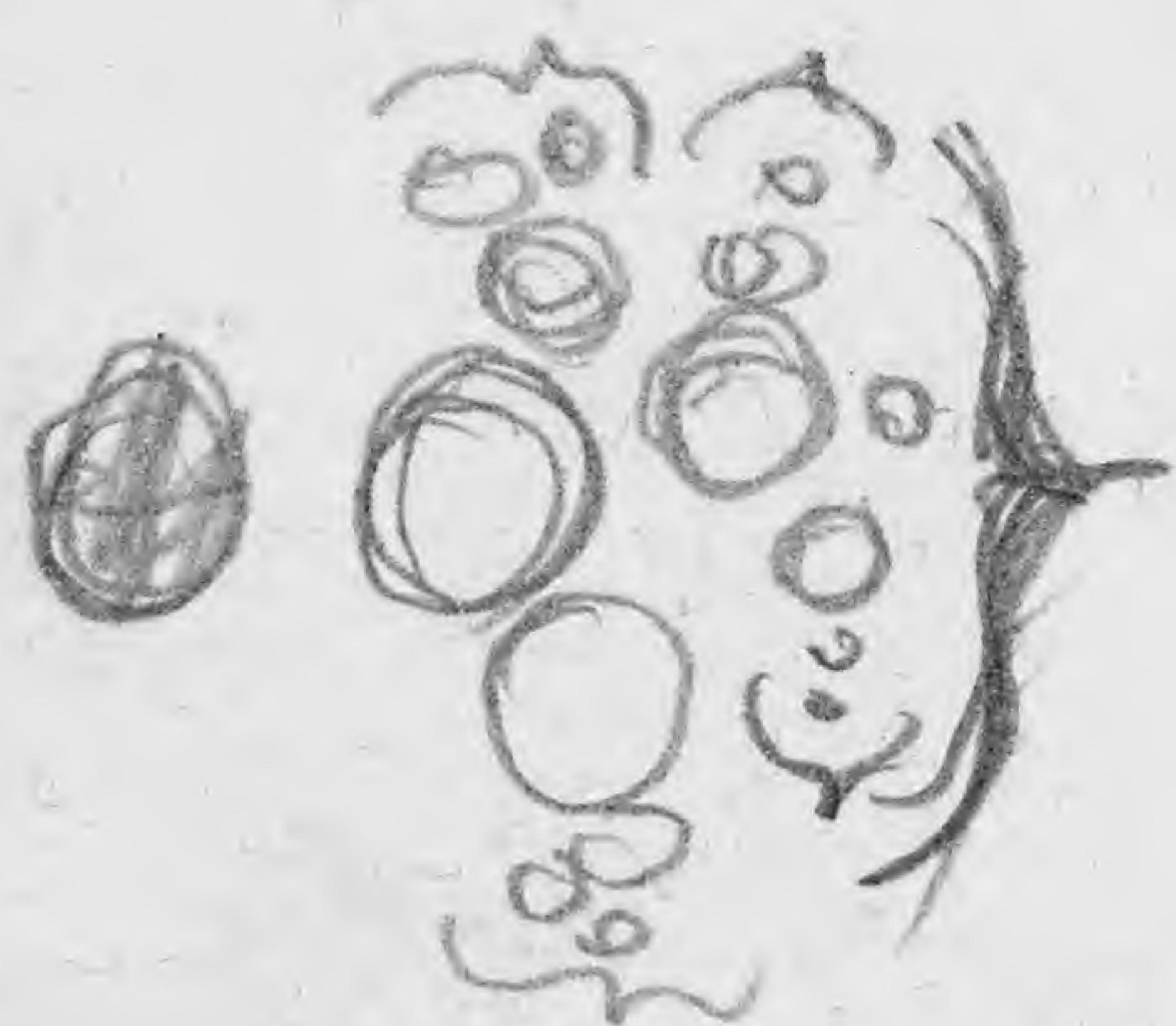
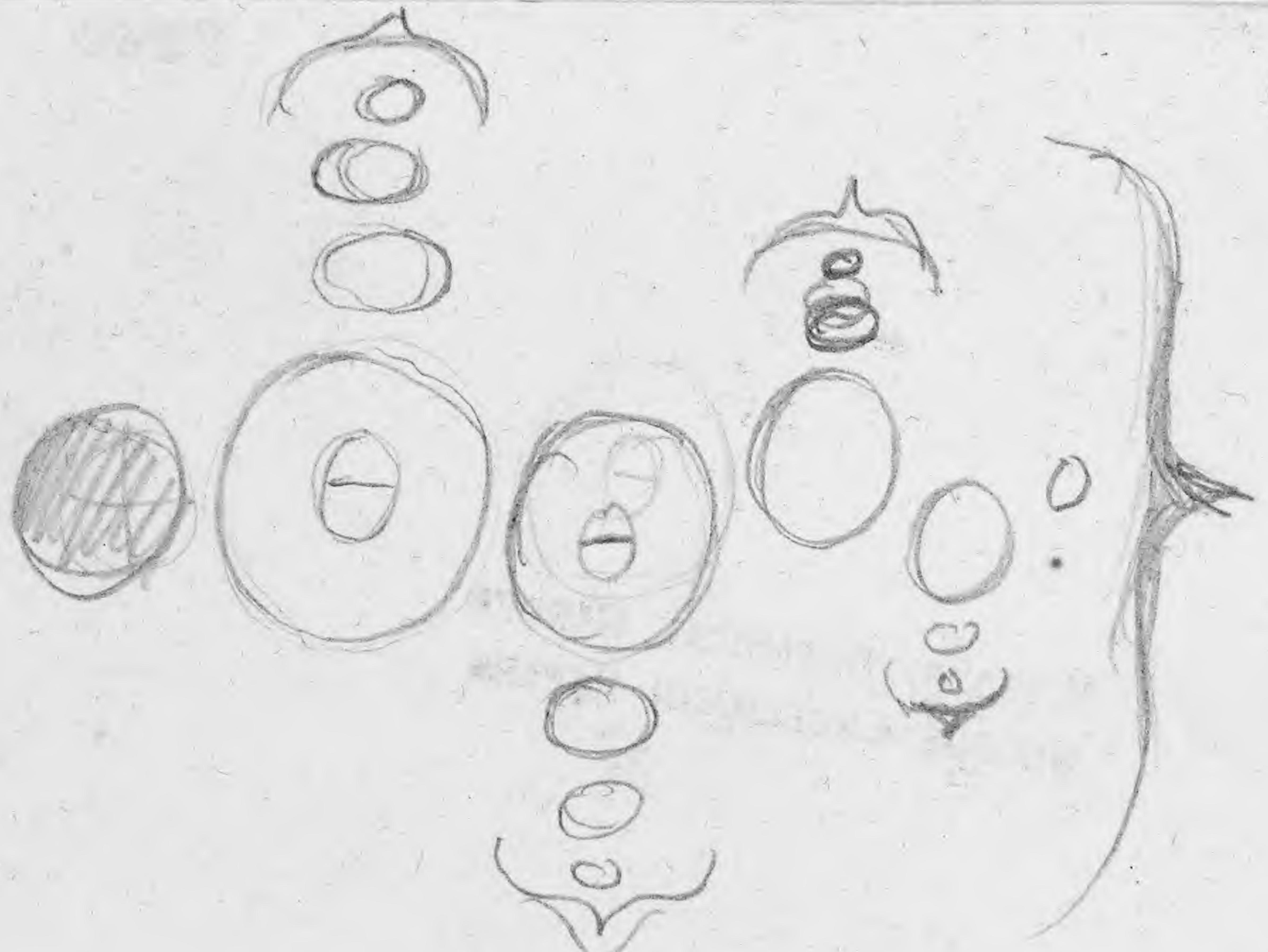


GEORGE ENGELMANN BOTANICAL NOTEBOOKS

Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

C. chlorantha

Sept 1860



the position of
the flowers really
appears thus.



0 1 2 3 4 5 6 7 8 9 10

cm

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BOTANICAL
GARDEN

5260

ALEX. LEITCH,
APOTHECARY & CHAPMAN'S
PHARMACEUTIST.

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

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0 1 2 3 4 5 6 7 8 9 10

cm


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Asiatic Chloromanga

Sept 1860



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cm

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0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

Bollen

Cassia chlorosarca

Sept 1860

× 482



0.013



0.012



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cm

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GARDEN

DER,
ARKET STREETS,

5262

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cm

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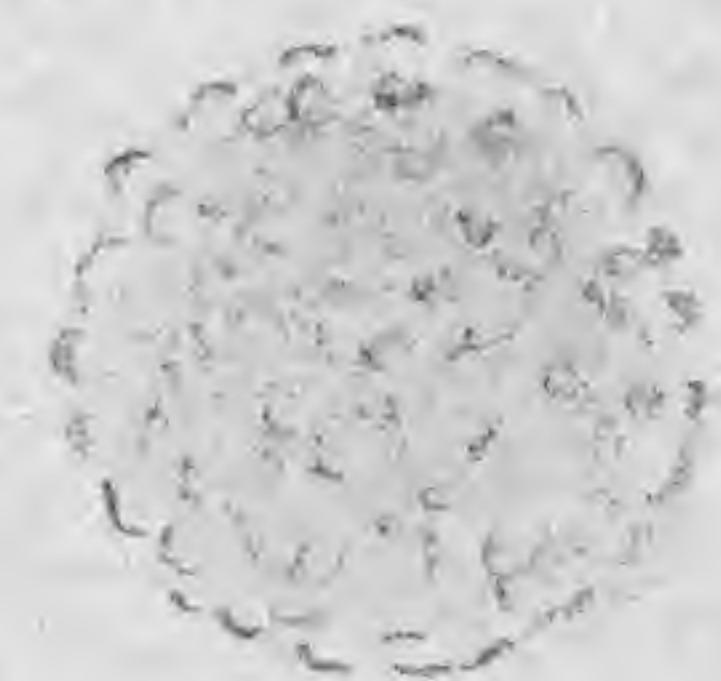


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Cassata chlorantha

St. Louis Aug 30 1863

x415

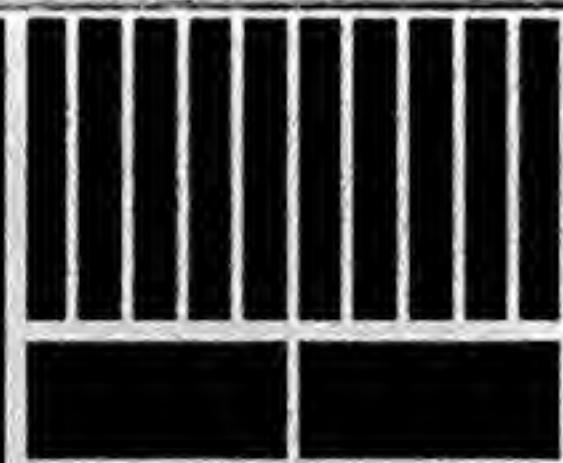


fresh pollen
in water

x415

Pollen 0.012 - 0.013 mm

effete?



0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

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LETTE
CHARMAGEUTIST
Burch & Olive Sts. St. Louis, Mo.

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0 1 2 3 4 5 6 7 8 9 10

cm

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GARDEN

Cuscuta reflexa Engelm.
sub nom *C. American*
De la Caroline
Bosc
in Herb Cesatii



0 1 2 3 4 5 6 7 8 9 10

cm

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cm

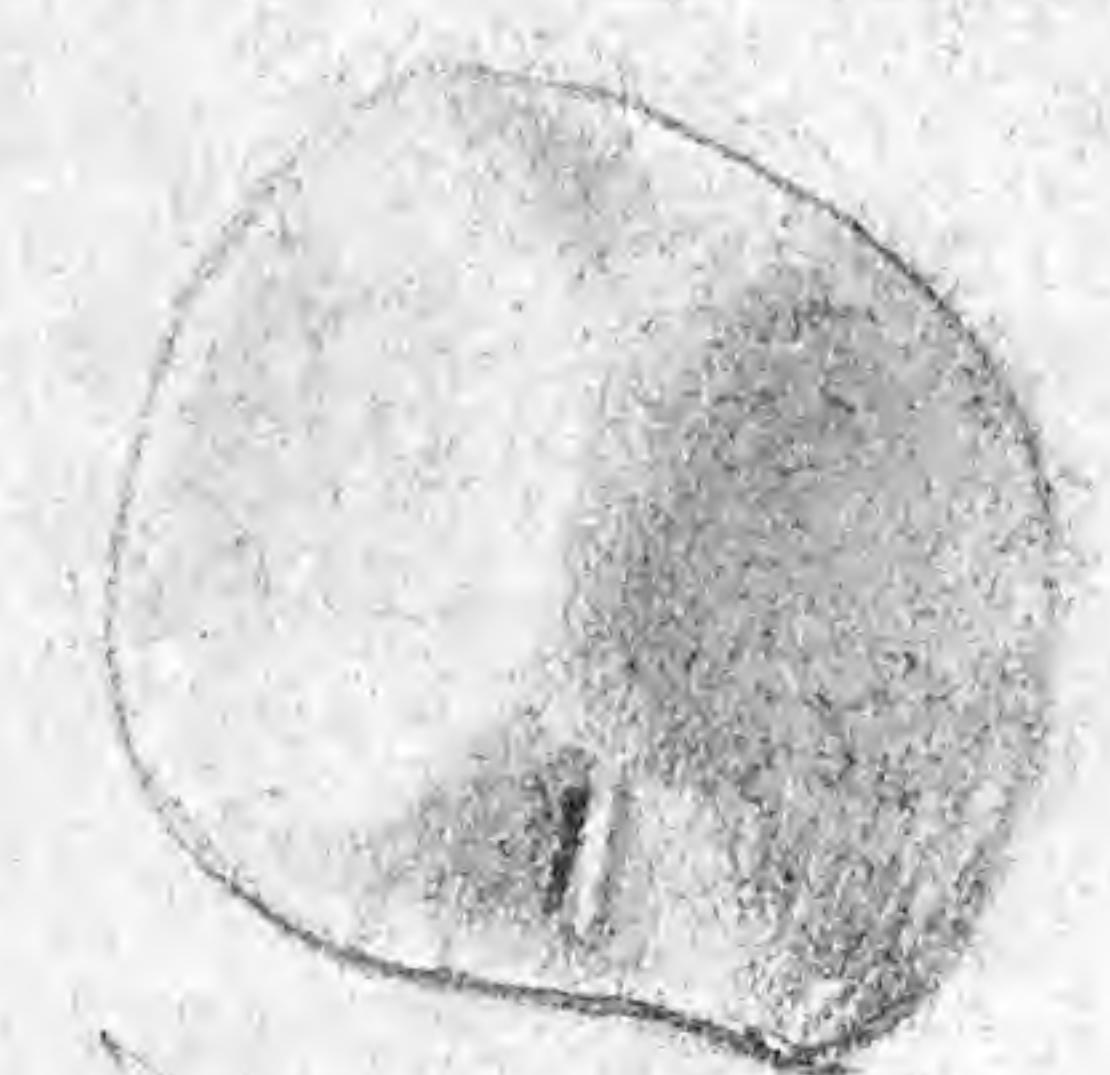
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C. inflata

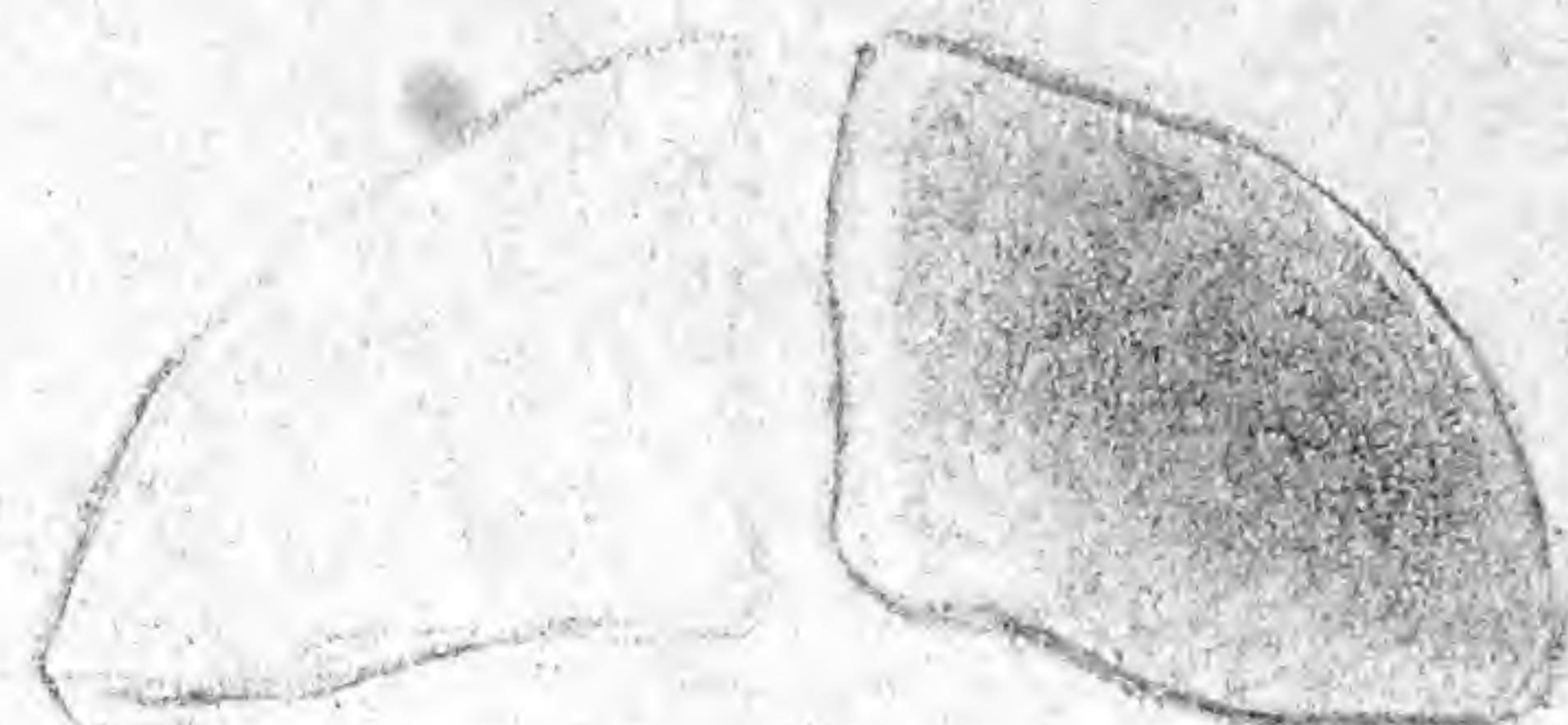
Nov 1859



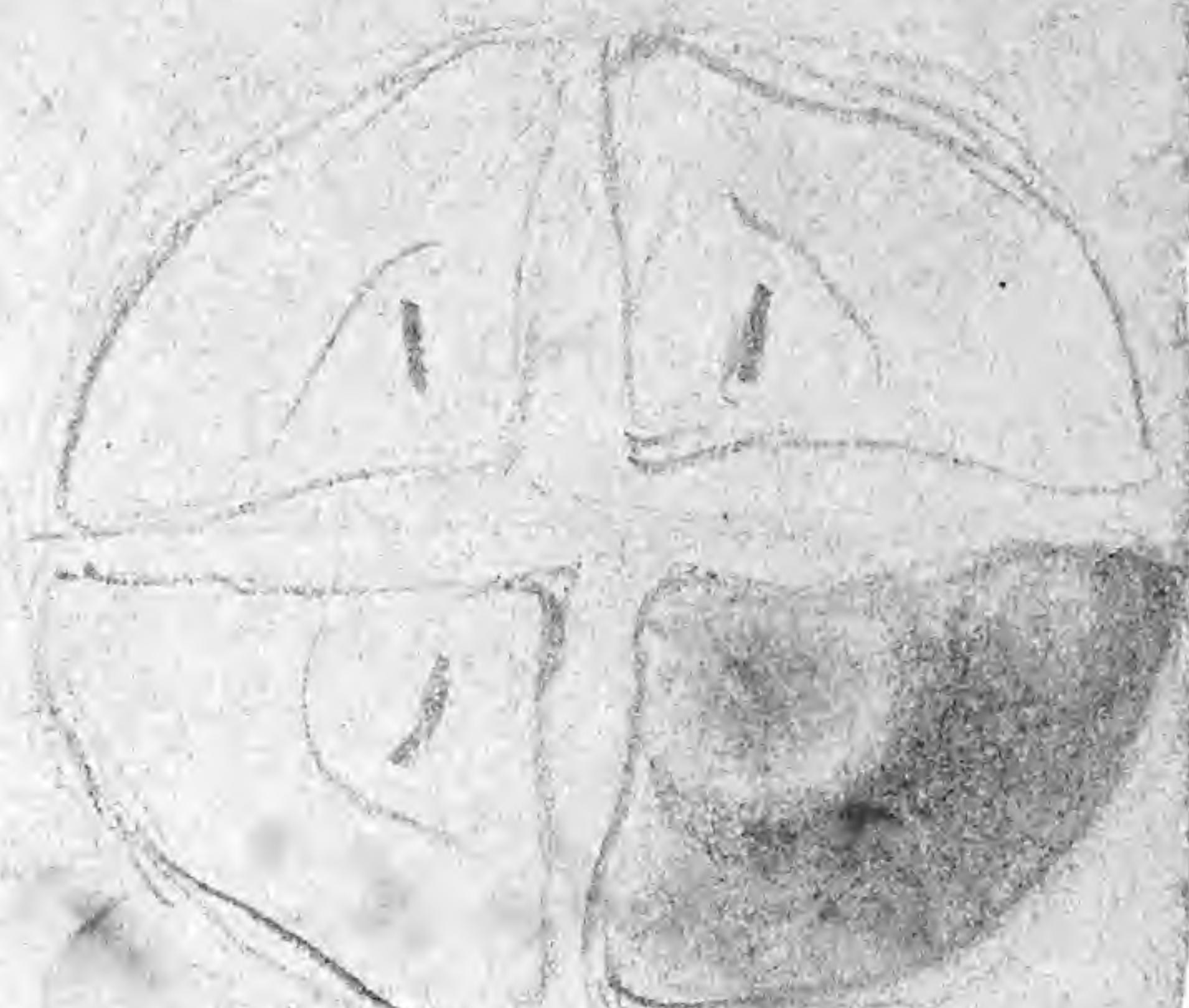
front view



top side view



top



side



frontal

$2\frac{3}{8}$ revol.



frontal

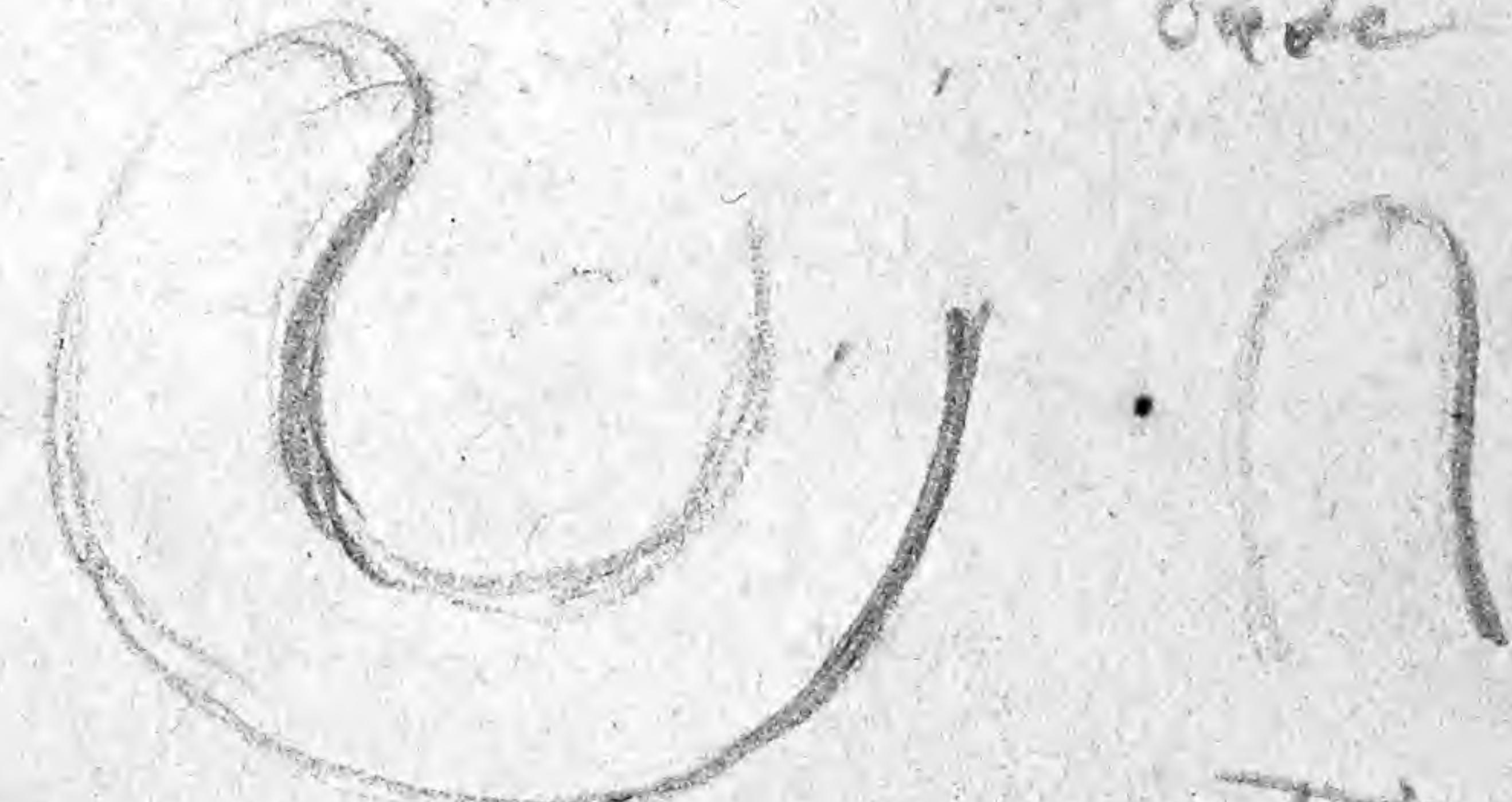
$3\frac{1}{4}$ revol.

frontal

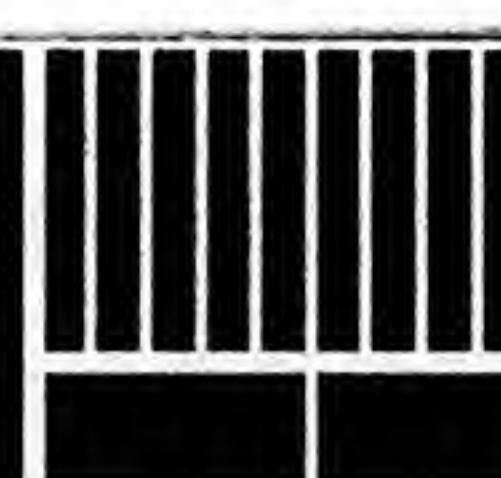


irregular or
more or less
regular

warty surface of seed regular
100 times magn.



100 times
mag.



0 1 2 3 4 5 6 7 8 9 10

cm

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20

Euphorbia

5265

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50 | 650 | 0,03

75 | 180 | 0,24
150 | 300*Euphorbia pilulifera*

Tillymiles Botryodes Jezelius
multiciliata villoso
Barthl. Jezl p. 223 tab 109
Engl. Karte Azi. sp. 651
Boen flori. Ind. p. 602

30 | 10 | 0,32



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cm

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GARDEN

Cuscuta inflexa

Aug 1860

x 412

"
= 0.017



0.015



Pollen 0.015-0.018 mm, usually 0.017

x 60



dry

x 60



ovalum

same in sol potass
and slightly pressed

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cm



MISSOURI
BOTANICAL
GARDEN

5266

M. W. ALEXANDER,
SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,
ST. LOUIS.

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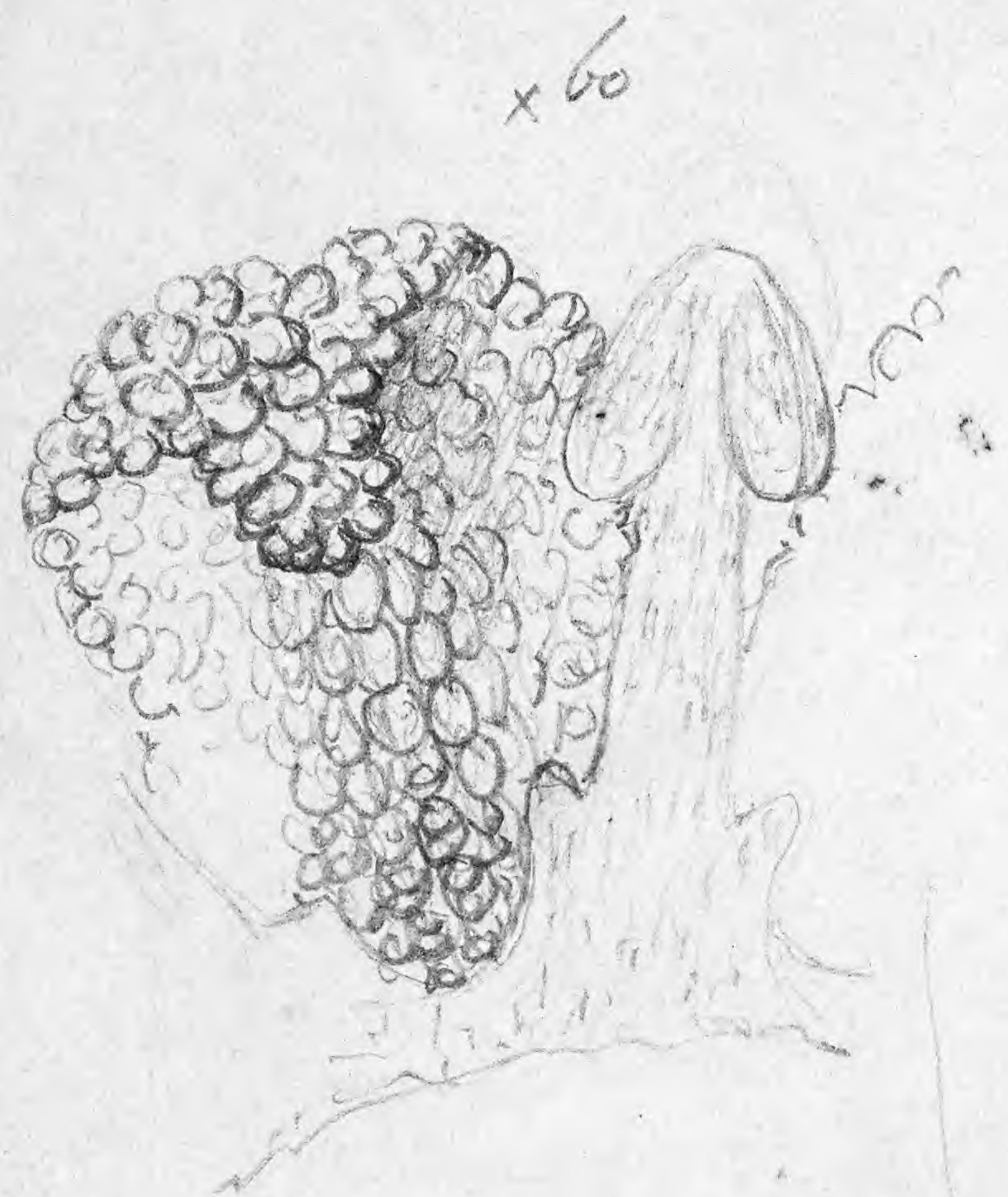
0 1 2 3 4 5 6 7 8 9 10

cm

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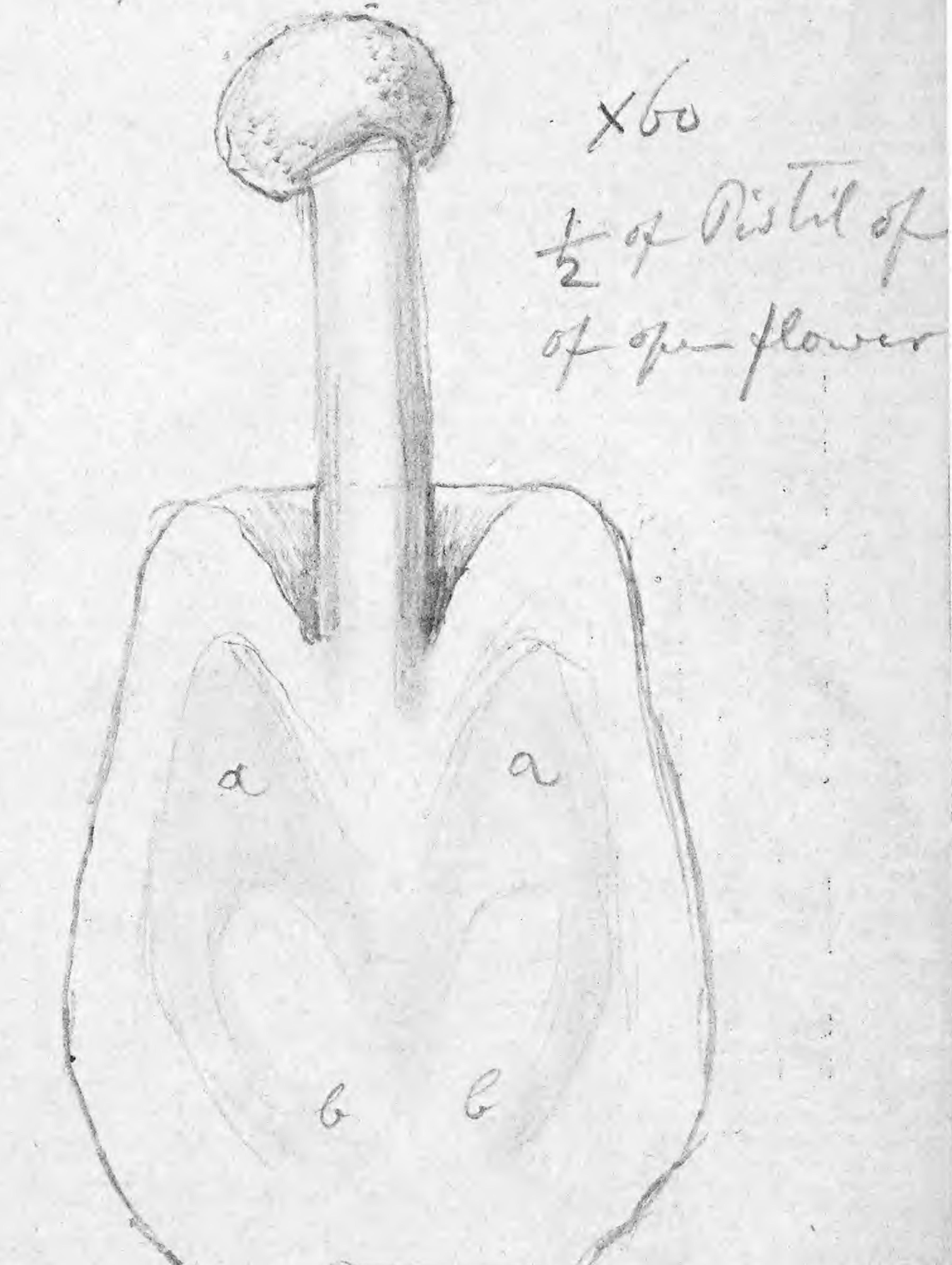


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GARDEN



lobe of corolla & stamens of
~~the~~ young flower bud.
 corolla reflexed, scales
 indicated by two blunt
 teeth.

C. inflexa Aug. 1860



a. a. thinner part of dissemin.
 b. b. corolla shining through



0
cm

1 2 3 4 5 6 7 8 9 10

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GARDEN

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SOUTH-EAST CORNER OF FOURTH AND MARKET STREETS,

ST. LOUIS.

5267
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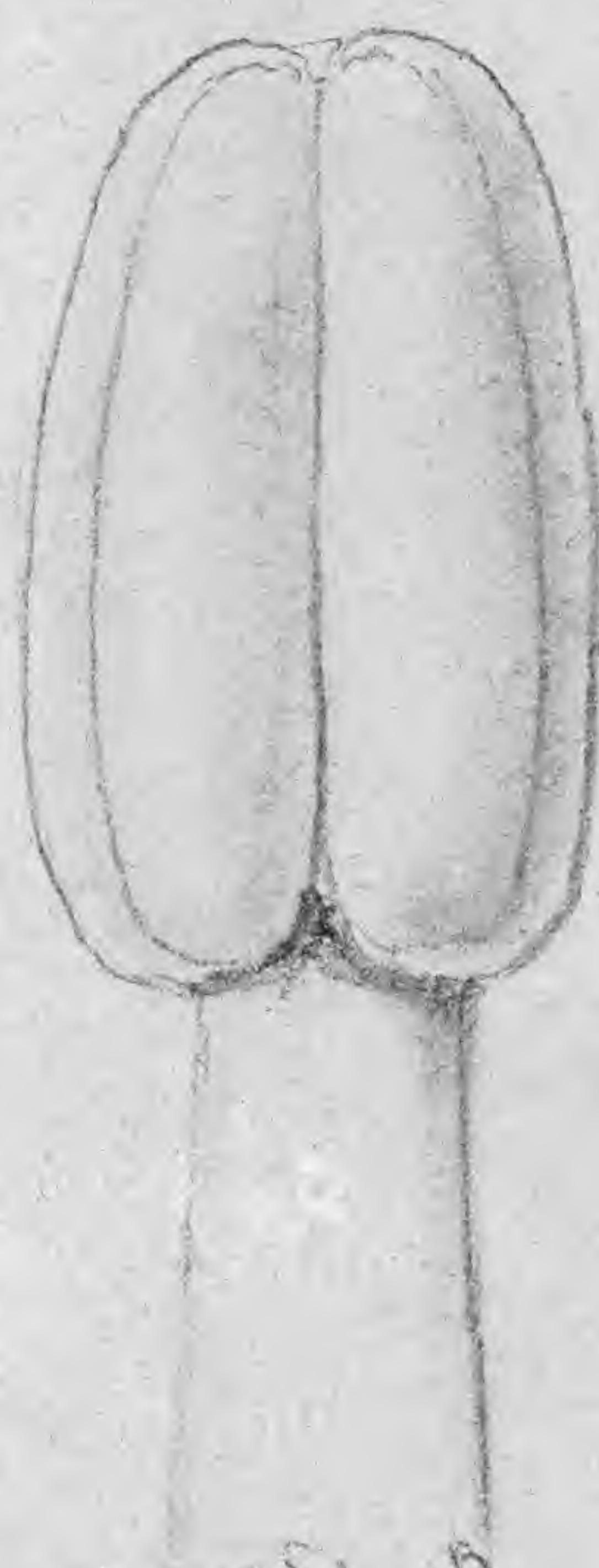


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GARDEN

Ceratodon glaucomyces

Oct 3-1863

x30



x10



st. down

1000



top view



Poll x 415



0 1 2 3 4 5 6 7 8 9 10

cm

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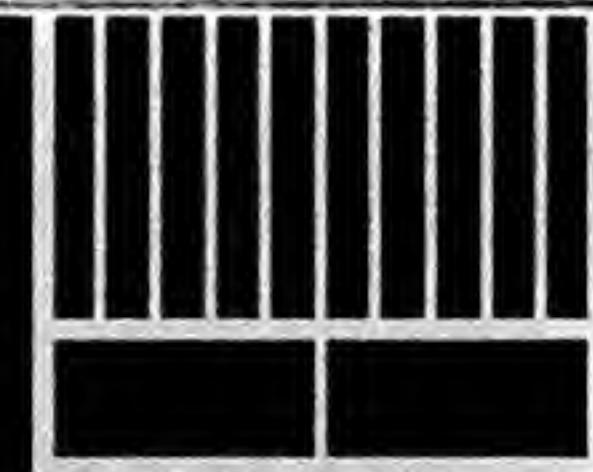
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0 1 2 3 4 5 6 7 8 9 10
cm

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GARDEN

Kew Sept 1x69

Bentham & Miller. Fl. Austral.
London 1869. vol. 1.

1441. *Cassia chiensis* Desv. Engl.

C. australis Brown. (older name, 1810)

C. Tasmania Engl. Port Phillip

J. Miller - who believes it introduced.

probably 3 or 5 ft. high - ovate compoundate
stems large obscurely lobed
capitate. - Capsule short, seed
with a small hilum. -

large seeds



0 1 2 3 4 5 6 7 8 9 10

cm

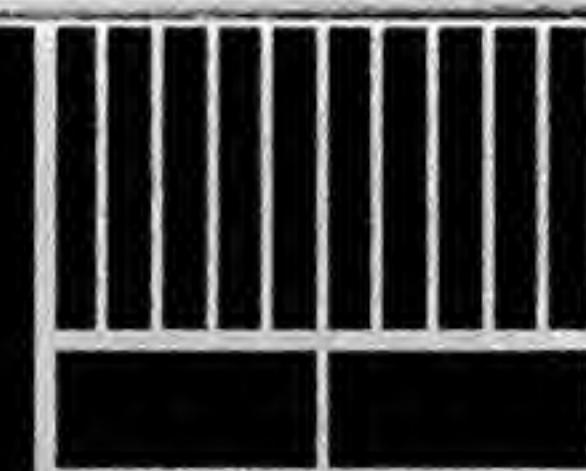
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0 1 2 3 4 5 6 7 8 9 10
cm

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GARDEN

C. California E. L. Greene 650 Sierr Nevada 1874
 Boerner 2362 Pachecos Pass 1862
 Bolander 5055 Upper Tuolumne 1866
 Bigelow Colorado, on deln 1852
Douglas 1833 (typical)
Hartweg Monterey 1848
Torrey 325 Clear Lake
Cooper, Mohave
de Rottrock 332 Arizona 1874
de Thunberg San Diego 570 1852
 " San Felipe 633 1852
Peattie, Santa Barbara 1852
de Neuberry 1858.
Reconow 644 1846
 " 506 1846
C. salina C. L. Greene ^{valley} 321 1874 } formerly *C. subcordata*
 Hedley & Hartweg 1879 1868/9 } bracteolata
 Bolander St. Fr. 570 1866 }
Wright More island 1855 } (typical)
de J. Remy Rio Grande 1855? formerly *C. California*
C. Parry 206 " .. 1874? *var. squarigena*
C. salinolosa Wright More island 1855
 Boerner 2698. Sierr Nevada 1863
 Bolander 2436. Coast range, Morgan Valley 1863
 Bolander 2674 Clear Lake 1864
de Horn Fort Tejon 1863
E. L. Greene Napa Valley 1874 N. 175
de Horn Owen Valley & Fort Tejon 2849 1863
 Bolander, Oakland hills 1866
Remy Sierr Nevada 1855 Novellie
de Horneman 1853 (typical)
de Cleveland San Diego 1874
de Lemmon Yosemite Valley 1874
de L. Conte 1858



0 1 2 3 4 5 6 7 8 9 10
cm

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BOTANICAL
GARDEN

Hand Schrift entstellt mit der Presse auf Zigaretten
die Presse von St Louis nur vor einigen Jahren auf
gebraucht worden, ist fast doppelt so groß für mich
und kann nicht mehr gebraucht werden.
so Presse groß, dass die Farbe von den Pillen mit
den Stauben nicht übereinstimmen, die von St Louis
ausfallen waren jetzt nicht mehr für mich
und waren von mir dunkler geworden.
Die flüssige Presse war ebenfalls von dunkler Farbe,
aber war nicht so gut wie die Fabrik Kainz
gewesen jetzt ist die Presse gebraucht und nicht
auf einer Lofta Caffee das Prong und befreundete
mich habe ich sie der Zeitung der Zigaretten gebraucht,
mit L. D. & Adams 11.11.11.

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GARDEN

Flora California Sept 1875

Cuscuta. Lin

Calyx 5- (rarely 4-) cleft or parted; corolla bell-shaped or somewhat tubular, the spreading borders 5- (rarely 4-) cleft; stamen inserted in the throat, furnished with a scale-like fringed appendage below this insertion in the throat. Ovary 2-celled, 4-ovuled, styles 2, mostly distinct. Pod 1-4 seeded. Embryo thread-shaped spirally coiled in the rather fleshy albumen, destitute of cotyledons, or with a few alternate scales (belonging to the plumbule); germinating with soil but not rooting. - ^{annual} ^{much branched} ~~Leptophyllum~~ herbs yellowish or reddish in color, with thread-like coiling stems, leaving 4 few minute scales in place of leaves.

All the species of the California ^{have} belong to the section *Cladotrichia* - *graminea*, with styles of unequal length, capitate stigmas ^{and an} in dehiscent pod ~~and~~ x Corolla cylindrical, if it covers the top of the pod ~~Top of the pod covered by the germinating~~

C. subinclusa, Dur. & Hilz. stems rather coarse, flowers sessile or short-peduncled, in dense large ($\frac{1}{2}$ -1 inch diam) clusters, long (2 to almost 4 lines long) ~~calyx~~ ~~with~~ ~~long~~ ovate-lanceolate, ^{minutely granulated or} ^{acute} lobes of corolla ^{much shorter than tube} ~~much shorter than tube~~ spreading, anthers ovate, sessile or short stalked, scales ~~in lower~~ ~~part of lobes~~, ^{reaching to the middle of tube only} narrow, fringed, styles longer than the anthers pointed ovary, capsule ^{conic} ^{whitened} ~~covered~~ ~~by the~~ ~~innermost~~ corolla, seeds mostly single.

Apparently the most common California species. On shrubs or coarse herbs throughout California ~~mostly~~ ~~more abundant~~ in the mountains, the Coast range as well as the Sierras, but also near the coast (*C. canothi*, Benth.). - Flowers ^{flabellate} spreading the calyx of from twelve

Cuscuta salina, Engelm. stems slender, flowers ^{peduncled} in loose cymes of $1\frac{1}{2}$ - $2\frac{1}{2}$ lines long) shorter and wider than the last (*subinclusa*), - calyx lobes ovate to white ovate, as long as the anthers but usually broader and overlapping, ^{spreading} ~~decurrent~~ lobes of the corolla, and as



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GARDEN

the short and very angular tubes of the corolla;
another word, ~~as~~ ^{as} ~~for~~ states the plant
of leaves as long as long as the entire flower; scales
mostly shorter than the tube, sometimes incomplete,
steader style is as long or shorter than the following;
corolla not sessile, not curved, by the works come
such mostly single.

2 Salin Member on drifts change down to
smooth ~~bottom~~ to sandstone.
around the Bay of Salina - on smooth on bottom
on the Rio Argen on ~~the~~ ^{the} sea. C. subrotunda
was observed Eagle C. California var? squamigera
Eagle the island form. —

2 may respects limestone between Johnsbury
and Colford, as regards the form
of the shorter open ^{much more delicate} valves of the
~~long~~ ^{oval} species of ~~valves~~ ^{oval} ~~with~~ ^{with} the
presence of ~~valves~~ ^{oval} ~~with~~ ^{oval} ~~the~~ ^{oval} valves

Var. B. *Coquilea*; flowers $1\frac{1}{2}$ - $2\frac{1}{2}$ l. long, lobes of
calyx short & ~~long~~^{long} than it, and sometimes ~~reversed~~^{reversed} at top;
lobes of corolla ~~long~~^{longer} & slender, longer than the tube ~~sometimes~~^{sometimes}
twice as long, flaps & awl ~~longer~~^{longer} & stiffer much longer than the
tube; pod mostly 1-seeded covered by the corolla



5

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C. Geiger cont.

The Bank of San Diego

Bruley near the coast of the South coast of the Continent
and into Arizona and Colorado

The spines
extreme number
shot or broken
the delicate
in the
extreme
intended to
but all are easily recognized
sharply lobed
white flowering,
without any calyx
parallel lobes

Near Clear date on coarse limestone at, below
A west of the with U. States, which extends through
a good part of the ~~area~~ apparently ~~the~~ more in California
text of the corolla flaky - granular in a ~~the~~ ~~the~~ egg deep
flame of clay

only one in California.

C. dentata - regular stem, capping, flowers ~~many~~
all ~~in~~ ^{short} cymes - pedicels in small umbell-like clusters; tube of
the broadly campanulate corolla included in the rounded blunt
dentata calyx as long as its rate rounded spreading lobes,
* scales reaching to base of stamens } teeth all on very short
dentata at rounded tip; styles as long as
pointed ovary, with very small scarcely capitate stigma
and covered by the other corolla. seeds over

for locking in the mouth can of West from
and probably to be cooked for the original party
of California



0

7 8 9 10
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32. *odotrys* Ry. ~~325~~ C. umbellif.
33. *C. appendiculata* with iron-wire capsules

334

34 *C. octandra* HORN

35 *C. Temmiflor* Ry. by ~~longanata~~ with closed pod
have been found in Arizona and may ^{also} occur in
the southeast part of Calif.

Am.
Cal
Sal
Sub
Dec
Sent

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5272

inhab. to

A genus of nearly 80 species ~~of~~ ^{divided} distributed
according to the chart of types & stigmas
in 3 subgenera: the first of which; *Gramine*, belongs
entirely to the old world, the second *Gramine* ~~lutea~~
almost entirely to the new world, and the last *monogyna*
scattered over the globe ^{to Australia} & ^{smaller} scattered
The Calif. is ^{belong} to ^{the} *Gramine* subgenus
with capitate stigmas and a closed pod.



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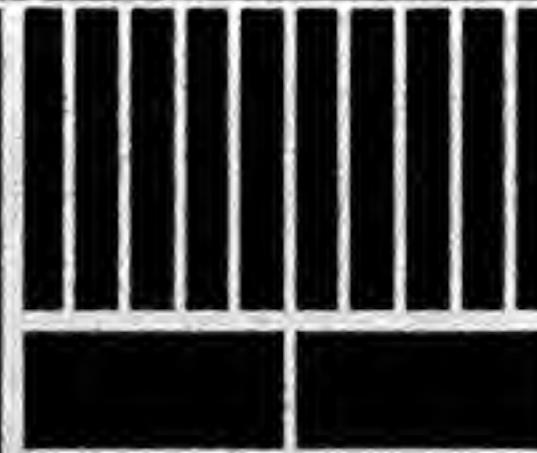
10

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Crinum umbrosum Dugn common on
Selvania on sea coast West of
Trinity - Pickley Bar. A.A.
XII.21.68.



0 1 2 3 4 5 6 7 8 9 10

cm

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